

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-19. (canceled)

20. (original) A method of passively aligning optical elements comprising:
aligning and securing one or more optical elements to bases; and
securing and passively aligning one or more of the bases to a substrate.

21. (currently amended) The method of claim 20, wherein ~~the bases are each base is~~ is
passively aligned and secured ~~on to~~ to the substrate by a receiving structure.

22. (currently amended) The method of claim 20, wherein ~~the optical elements are each~~
~~optical element is secured to the bases the respective base by a flexible gripping elements having~~
a pair of spaced sidewalls defining a channel for receiving, ~~the sidewalls adapted to hold the~~
~~optical element in position on the base~~.

23. (currently amended) The method of claim 21, wherein the receiving structure includes a
flexible gripping element having a pair of spaced sidewalls defining a channel for receiving, ~~the~~
~~sidewalls adapted to hold the base in the position on the substrate~~.

24. (currently amended) The method of claim 23, wherein ~~the bases are each base is sized~~
and shaped to cooperate with the receiving gripping element to secure the base to the substrate.

25. (original) The method of claim 23 wherein the bases are sized and shaped such that they
are interchangeable in each of the receiving structures.

Application Serial Number: 10/626,457
Attorney Docket No.: SP02-165

Page 4

27. 26. (currently amended) The method of claim 21, wherein the receiving structure includes a depression in the substrate ~~adapted to hold~~ that receives at least a portion of the base in position on the substrate.

28. 27. (currently amended) The method of claim 21, wherein the receiving structures and bases have predetermined and standardized sizes and features.

28. (new) An apparatus for passively aligning optical elements, comprising:
one or more bases, each base having a first receiving structure configured to secure an optical element to the base; and
a substrate having one or more second receiving structures at predetermined locations, each second receiving structure configured to secure and passively align one of the bases to the substrate.

29. (new) The apparatus of claim 28, wherein the first receiving structure secures the optical element to the base at a predetermined spatial and angular position.

30. (new) The apparatus of claim 28, wherein the first receiving structure aligns the optical element to the base.

31. (new) The apparatus of claim 30, wherein the first receiving structure comprises a flexible gripping element having a pair of sidewalls defining a channel for receiving the optical element and securing the optical element to the base.

32. (new) The apparatus of claim 28, wherein the second receiving structure includes a flexible gripping element having a pair of sidewalls defining a channel for receiving the base and securing the base to the substrate.

33. (new) The apparatus of claim 32, wherein the sidewalls include upper and lower portions and spacing between the upper portions is less than spacing between the lower portions.

33. (new) The apparatus of claim 28, wherein the base includes an alignment feature which cooperates with an alignment feature on the second receiving structure, thereby securing the base to the substrate.
34. (new) The apparatus of claim 33, wherein the alignment feature includes a groove.
35. (new) The apparatus of claim 28, wherein the second receiving structure includes a recess located in a surface of the substrate for receiving at least a portion of the base.
36. (new) The apparatus of claim 28, wherein the bases are sized and shaped such that the bases are interchangeable in each of the second receiving structures.
37. (new) The apparatus of claim 28, wherein the receiving structures and bases have predetermined and standardized sizes and features.
38. (new) An optical device, comprising:
 - a plurality of optical elements;
 - a plurality of bases having first receiving structures configured to secure the optical elements to the base; and
 - a substrate having a plurality of second receiving structures at predetermined locations, the second receiving structures configured to secure and passively align the bases to the substrate.
39. (new) The apparatus of claim 38, wherein the optical elements are selected from the group consisting of optical fibers, lensed fibers, prisms, filters, thin film filters, switching elements, lenses, graded index lenses, gratings, mirrors, MEMS mirrors, electroholographic switches, VCSEL arrays, variable optical attenuation elements, tunable filters and LCD switches.